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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,321	06/25/2003	Raj D. Patel	D/A3120	3103
25453	7590	01/06/2005	EXAMINER	
PATENT DOCUMENTATION CENTER XEROX CORPORATION 100 CLINTON AVE., SOUTH, XEROX SQUARE, 20TH FLOOR ROCHESTER, NY 14644			GOODROW, JOHN L	
			ART UNIT	PAPER NUMBER
			1756	

DATE MAILED: 01/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/603,321

Applicant(s)

PATEL, RAJ D.

Examiner

John L Goodrow

Art Unit

1756

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3, 8-20 and 24-31 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 4-7 and 21-23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities: The reference to copending applications should be updated.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 8-20, 24-27, and 29-30, rejected under 35 U.S.C. 103(a) as being unpatentable over Patel et al. "684" in view of Vanbesien et al, Cheng et al, Patel et al. Patel "684" teaches the toner process in which a latex emulsion of resin, water, and colorant are mixed and heated. The process is an aggregation process for the preparation of a toner. The acicular magnetite is shown in Col. 10 line 62 – Col 11 line 60 to have remanent magnetization and saturation magnetization and provides a shape factor of from 110 to 148. The secondary references teach various surfactants, coagulants and specific latex resins useful in the aggregation process for the formation of toners. Patel et al "658" teaches a second heating with an acicular latex and an external coagulant such as polymetal halides and polymetal sulfosilicates Col. 6 lines 10-15. Cheng et al teaches the Tg of the latex resin and the heating of the mixture can control the fusing of the aggregates and thus the GSD of the toner note Col. 5 – Col. 6.

Vanbesien et al also teaches the heating step of above and below the Tg of the latex resin and the surface additives such as silica can be added during the aggregation process note Col. 13 lines 52-67. It would be obvious to one of ordinary skill in the art at the time of applicants' invention with a reasonable expectation of success to use the surfactants and coagulants in the process of aggregation of a latex composition in the toner process of Patel "684" to control the physical properties of the toner particles.


4. Claims 28 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patel et al. Patel et al teaches the aggregation process for the formation of a toner with a shape factor and the two heating steps. The use of acicular magnetite and silica is also taught note Col. 21 lines 8-26. The heating steps and the relationship to the Tg of the resin is shown in Col. 20. lines 26-34. The temperature above and below the aggregation and coalescence steps is dependent upon this temperature. It would be obvious to one of ordinary skill in the art at the time of applicants' invention with a reasonable expectation of success to use the relationship of the Tg of the latex resin in the process of aggregation and coalescence of the toner produced by the toner process as taught in Patel et al.

5. Claims 4-7 and 21-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John L Goodrow whose telephone number is 571-272-1384. The examiner can normally be reached on Monday -Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark F Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
John L Goodrow  
Primary Examiner  
Art Unit 1756

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